

RSOI: Using Test Plots to Identify Drought-Tolerant, Low-Maintenance Vegetation Options to Discourage Airfield Use By California Squirrels and Western Burrowing Owls, Naval Air Station Lemoore, Lemoore, CA

**REQUEST FOR STATEMENTS OF INTEREST
WITHIN THE COOPERATIVE ECOSYSTEM STUDIES UNIT
NUMBER N62473-21-2-0014**

**Project Title: USING TEST PLOTS TO IDENTIFY DROUGHT-TOLERANT, LOW-MAINTENANCE VEGETATION OPTIONS TO DISCOURAGE AIRFIELD USE BY CALIFORNIA SQUIRRELS AND WESTERN BURROWING OWLS (EPR 63042NR113)
NAVAL AIR STATION LEMOORE, LEMOORE, CALIFORNIA**

Responses to this Request for Statements of Interest (RSOI) will address measures in support of Vegetation Test Plots and Burrowing Owl monitoring at Naval Air Station Lemoore, Lemoore California. Approximately \$89,791.00 to \$95,000.00 is expected to be available to support the base requirements of this project. Approximately \$81,232.00 to \$86,000.00 is expected to be available to support the option requirements of this project.

Type of Assistance Instrument Anticipated: Cooperative Agreement

Authority: Cooperative Agreement under 16 USC §670c-1

Eligible Applicants: Any Californian or Pacific Northwest Cooperative Ecosystem Studies Unit (CESU) cooperative partner who qualifies under the DoDGARS Part 34 or 2 Code of Federal Regulations 200 is eligible to apply.

Cost Sharing: Not required

Background:

Naval Air Station (NAS) Lemoore hosts 15 operational Strike Fighter squadrons and employs various methods to mitigate the potential for bird-aircraft strikes. Various raptor species represent the greatest Bird/Wildlife Aircraft Strike Hazards (BASH) at the Station. They are attracted to the airfield by the abundance of prey species, including California ground squirrels (*Spermophilus beecheyii*) and other small mammals. Efforts to control the prey base via fumigation and burrow destruction have been employed but offer short-term solutions to this complex problem. Longer-term habitat modifications in and around the two 13,500-foot, parallel but offset, runways at the airfield are needed for sustained BASH mitigation.

The western burrowing owl (*Athene cunicularia*; hereafter BUOW) also occupies the airfield at NAS Lemoore. The BUOW is listed as a Bird of Conservation Concern (BCC) by the United States Fish and Wildlife Service (USFWS), a Species of Special Concern by the California Department of Fish and Wildlife (CDFW), and a Mission Sensitive Species (MSS) by the Department of Defense (DoD). Previous research conducted at NAS Lemoore from 1998 to 2008 indicated an average of 62 BUOW breeding pairs per year, with a maximum of 86 pairs. A population assessment conducted at the Station in 2013 documented 37 pairs. A comparison of results of population assessments conducted on this species indicates this population is low but stable, or potentially experiencing a long-term decline. Though current population estimates are unavailable, the NAS Lemoore BUOW Management Plan recommends initiating research to identify population declines at a trigger point of 32 pairs.

BUOW nest and roost in burrows created by ground squirrels, and methods that modify the airfield environment to exclude or discourage use by ground squirrels at NAS Lemoore will likely also render the airfield unsuitable as habitat for BUOW. BUOW also occupy other areas at NAS Lemoore, including several sites to which BUOW pairs were actively relocated between 2016 and 2020. Monitoring demographics, habitat use, and threats to BUOW on and off the airfield will help to identify critical habitat requirements as well as on-post threats to the species, enabling NAS Lemoore to improve habitat quality in

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areas outside of the airfield and mitigate the potential loss of suitable habitat on the airfield expected from habitat modifications to reduce the prey base.

Brief Description of the Anticipated Work:

Explore possible drought-tolerant, low-maintenance, low-growing vegetation options to replace the existing grasslands and discourage habitat use by squirrels and BUOW. Create test plots at locations on NAS Lemoore to be determined through discussions with the installation representative (IR) to test if the proposed vegetation establishes, how much effort is required, and if it works to discourage use by squirrels and BUOW. Passively relocate BUOW occupying test plots prior to planting and monitor BUOW on the airfield and elsewhere on the installation; with monitoring to include standard metrics that allow for population assessment including: abundance/density, productivity, recruitment, and threats, among others [in accordance with Rosenberg and Gervais (2009), Garcia and Conway (2006) – Standardized Monitoring Strategies for Burrowing Owls on DoD Installations, and other relevant literature]. Unbanded owls should be captured and banded to align with long-term monitoring efforts.

The desired, long-term outcomes of these efforts would be 1) permanent modification of the airfield environment to discourage use by squirrels and, consequently, BUOW and 2) to maintain a stable population of >32 BUOW pairs in grassland areas outside the airfield grounds.

Please see enclosure 1 for full scope of work and enclosure 2 for applicable terms and conditions.

Period of Performance:

The period of performance covered by this agreement is 12 months upon award. The Cooperative Agreement will have one (1) 12 month Base Period, and four (4) 12-month Option Periods. The award of any option period may be awarded unilaterally anytime within the current 12-month period of performance. The total duration of this agreement, including any option periods, shall not exceed 60 months. The exact period of work performance will be determined upon award, the award of any Option Period is subject to the availability of funds and may be awarded unilaterally. The end date is the anticipated date that the Final Report is accepted by the Government.

Item	Period of Performance	Anticipated Award Date
Base Period	12 months from date of award	Fall 2021
Option Period 1	12 months from date of award	Fall 2022
Option Period 2	12 months from date of award	Fall 2023
Option Period 3	12 months from date of award	Fall 2024
Option Period 4	12 months from date of award	Fall 2025

Materials Requested for Statement of Interest/Qualifications:

Please provide the following via e-mail attachment to: Kevin Magennis (kevin.magennis@navy.mil).

- 1) SF 424 (Enclosure 3)
- 2) Research & Related Senior/Key Personnel Form (Enclosure 4). Please see Factor 1 for additional submittal requirements.
- 3) Research and Related Budget Form (Enclosure 5)
- 4) SF-LLL Disclosure of Lobbying Activities (Enclosure 6). If applicable, complete SF- LLL. Applicability: If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a

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Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the grant/cooperative agreement, you must complete and submit Standard Form - LLL, "Disclosure Form to Report Lobbying."

Reimbursement of pre-award costs will not be allowed.

Review of Statements Received: Proposals will be evaluated based on the following three factors: 1) Credentials of Key Personnel, 2) Scientific Approach, and 3) Reasonableness of Cost

NOTE: All requirements listed are minimum requirements. Offerors will be assessed on their ability to adhere to the listed requirements, completeness of responses, follow directions, comply with restrictions and provide quality control on their submittals. All page limits refer to 12 point font and single spaced one-sided pages.

Factor 1 - Credentials of Key Personnel

A. Principal Investigator: The Recipient shall designate one person as responsible for ensuring that provisions are in place, project and personnel supervision, quality control and meeting of reporting requirements are met on a daily basis. This person shall have, at the minimum:

- i. A PhD in Biology or related science.
- ii. Hold permits for capture and banding of BUOW or ability to obtain such permits within 30 days of award.
- iii. Experience and knowledge of ecosystem management in relation to: evaluating biological interactions, community changes, and avian ecology that is demonstrated by at least five years of previous work or research experience.
- iv. Experience of at least two years studying burrowing animals.

B. Research Associates: The Recipient shall designate one or more people as responsible for assisting the principal investigator. The person(s) shall have, or have immediate access to personnel that have, at the minimum:

- i. A Bachelor's Degree in Ecology or related science.
- ii. Sufficient experience with owls/raptors to allow for listing as subpermittee on banding permit
- iii. At least one year of experience with studying wildlife-habitat relationships and studying burrowing animals.

With the Research & Related Senior/Key Personnel Form, the Applicant shall provide type written resumes, not to exceed 3 pages, single spaced with 12pt font for the Principal Investigator, Senior Research Assistant, and Avian Technician. Resumes must state qualifications, experience with this type of project, professional registration and certificates. The Principal Investigator must also include a copy of a valid permit or detail experience sufficient for obtaining permit for this type of work. The permit will not be included in the 3 page maximum limitation.

Factor 2 – Scientific Approach

Not to exceed 3 pages, the Offeror shall develop an outline for their approach to addressing the anticipated work stated above. The Offeror shall be evaluated as to the soundness of the overall approach and use of any innovative techniques to accomplish project objectives.

Factor 3 - Reasonableness of Cost

After technical evaluation of the proposal, the Offers shall be analyzed to determine whether they are materially/mathematically balanced with respect to prices or separately priced items, and for fair and reasonable pricing. A clear cost breakdown of work elements to be accomplished detailing quantities for the various work items, unit, unit prices and extended prices will be required and will be evaluated. Evaluation will include an analysis to determine the Offeror's comprehension of the requirements of the proposed agreement as well as to assess the validity of the Offeror's approach. Please be sure to provide a proposal for the optional work years as listed within the statement of work.

Please provide your proposed budget on the provided pdf titled, "Research and Related Budget" form*(Enclosure 5).

***Form: RESEARCH AND RELATED BUDGET**

Complete the Research and Related Budget form in accordance with the instructions on the form. You must provide a detailed cost breakdown of all costs, by cost category, by the funding periods described below, and by task/sub-task corresponding to the task number in the proposed Statement of Work. You may request funds under any of the categories listed as long as the item and amount are necessary to perform the proposed work and meet all the criteria for allowability under the applicable Federal cost principles. The budget should adhere to the following guidelines:

The budget should be driven by program requirements. Elements of the budget shall include:

- Direct Labor - Individual labor category or person, with associated labor hours and unburdened direct labor rates.
- Indirect Costs - Fringe benefits, overhead, G&A, COM, etc. (must show base amount and rate). Justify in Field K.
- Travel - Number of trips, destination, duration, etc. Justify in Field K (on the form).
- Subcontract - A cost proposal as detailed as the applicant's cost proposal will be required to be submitted by the subcontractor. If applicable, include in Research & Related Subaward Budget Attachment Form.
- Consultant - Provide consultant agreement or other document that verifies the proposed loaded daily/hourly rate. Include a description of the nature of and the need for any consultant's participation. Strong justification must be provided, and consultants are to be used only under exceptional circumstances where no equivalent expertise can be found at a participating university. Provide budget justification in Field K.
- Materials - Specifically itemized with costs or estimated costs. An explanation of any estimating factors, including their derivation and application, shall be provided. Include a brief description of the applicant's procurement method to be used (competition, engineering estimate, market survey, etc.). Justify in Field K.
- Other Directs Costs - Particularly any proposed items of equipment or facilities. Equipment and facilities generally must be furnished by the cooperator/recipient (justifications must be provided when Government funding for such items is sought). Include a brief description of the applicant's procurement method to be used (competition, engineering estimate, market survey, etc.). Justify in Field K.

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Budget Justification (Field K on the form): Provide the required supporting information for the cost elements as shown above (see Research & Related Budget instructions) and listed as follows: indirect cost, travel, consultant, materials, and other direct costs.

Provide any other information you wish to submit to justify your budget request.

NOTE: Every deviation from the scope of work requirement must be identified. Proposer must identify the paragraph in the scope of work that is applicable and provide sufficient information to justify why the deviation is in the best interest of the government.

RELATIVE IMPORTANCE OF EVALUATION FACTORS – Factor 1, 2, and 3 are of equal importance.

Timeline for Review of Statements of Interest:

We request that Statements of Interest be submitted by September 2, 2021 2:00 PM local standard time. This Request for Statements of Interest will remain open until an investigator team is selected. Statements of Interest received after September 2, 2021 2:00 PM local standard time is considered “late” and may not be considered. Please submit requests for information/questions no later than August 30, 2021 2:00 PM local standard time.

Please send electronic responses and questions to:

Kevin Magennis, Contract Specialist Environmental Acquisition Core kevin.magennis@navy.mil

Point of Contact Information:

Kevin Magennis, Contract Specialist Environmental Acquisition Core
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